



Attorney Docket No.: 021795-000200US  
Client Ref. No.:

PTO/SB/01A (08-03)

Approved for use through 06/30/2006. OMB 0651-0032  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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**DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN  
APPLICATION DATA SHEET (37 CFR 1.76)**

|                           |                                                                               |
|---------------------------|-------------------------------------------------------------------------------|
| <b>Title of Invention</b> | <b>METHOD AND APPARATUS FOR IMPROVED HIGH-SPEED ADAPTIVE<br/>EQUALIZATION</b> |
|---------------------------|-------------------------------------------------------------------------------|

As the below named inventor(s), I/we declare that:

This declaration is directed to:

- ☐ The attached application, or
- ☒ Application No. 10/677123, filed on September 30, 2003,
- ☐ as amended on \_\_\_\_\_ (if applicable);

I/we believe that I/we am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought;

I/we have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above;

I/we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT International filing date of the continuation-in-part application.

All statements made herein of my/our own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon.

**FULL NAME OF INVENTOR(S)**

Inventor 1 John S. Wang Date: November 20, 2003

Signature: [Signature] Citizen of: United States

Inventor 2 Sudeep Bhoja Date: 11/20/03

Signature: [Signature] Citizen of: India

Inventor 3 Shanthi Pavan Date: 12/18/03

Signature: [Signature] Citizen of: India

Inventor 4 Hai Tao Date: 11/20/03

Signature: [Signature] Citizen of: Peoples Republic of China

☐ Additional inventors are being named on additional form(s) attached hereto.

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.  
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PTO/SB/81 (02-01)  
Approved for use through 10/31/2002. OMB 0651-0035  
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|                                                        |                               |                                                                          |
|--------------------------------------------------------|-------------------------------|--------------------------------------------------------------------------|
| <b>POWER OF ATTORNEY OR<br/>AUTHORIZATION OF AGENT</b> | <b>Application Number</b>     | 10/677,123                                                               |
|                                                        | <b>Filing Date</b>            | September 30, 2003                                                       |
|                                                        | <b>First Named Inventor</b>   | John S. Wang                                                             |
|                                                        | <b>Title</b>                  | METHOD AND APPARATUS FOR<br>IMPROVED HIGH-SPEED ADAPTIVE<br>EQUALIZATION |
|                                                        | <b>Group Art Unit</b>         | Unassigned                                                               |
|                                                        | <b>Examiner Name</b>          | Unassigned                                                               |
|                                                        | <b>Attorney Docket Number</b> | 21795-000200US                                                           |

I hereby appoint:

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I am the:

☐ Applicant/Inventor.

☒ Assignee of record of the entire interest. See 37 CFR 3.71.

Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).

**SIGNATURE of Applicant or Assignee of Record**

|                  |               |
|------------------|---------------|
| <b>Name</b>      | Shanthi Parar |
| <b>Signature</b> |               |
| <b>Date</b>      | 12/18/03      |

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

☒ \*Total of 1 forms are submitted.

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60085327 v1



Attorney Docket No. 15114-067400US  
Client Ref. No. A1051

**CERTIFICATE UNDER 37 C.F.R. § 3.73(b)**

Applicants: John S. Wang, Sudeep Bhoja, Shanthi Pavan, and Hai Tao

Application No.: 10/677,123

Filed: September 30, 2003

For: METHOD AND APPARATUS FOR IMPROVED HIGH-SPEED ADAPTIVE EQUALIZATION

Big Bear Networks, a corporation

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

certifies that it is assignee of the patent application identified above by virtue of either:

A. ☒ An assignment from the inventor(s) of the patent application identified above. The assignment was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame(s) \_\_\_\_\_, or for which a copy thereof is attached.

OR

B. ☐ A chain of title from the inventor(s), of the patent application identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the U.S. Patent and Trademark Office at Reel \_\_\_\_\_,  
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2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the U.S. Patent and Trademark Office at Reel \_\_\_\_\_,  
Frames \_\_\_\_\_, or for which a copy thereof is attached.

☒ Copies of assignments or other documents in the chain of title are attached.

The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date:

12/18/03

Name:

Shanthi Pavan

Title:

ASSISTANT PROFESSOR, EE DEPARTMENT, IIT Madras - SG

Signature: \_\_\_\_\_